

What is claimed is:

1. A method for storing and reading data in a write-once memory array, the method comprising:

5 (a) inverting a plurality of bits representing data to be stored in a write-once memory array;

(b) storing the inverted plurality of bits in the memory array;

(c) reading the inverted plurality of bits from the memory array; and

(d) inverting the inverted plurality of bits read from the memory array.

10 2. The invention of Claim 1, wherein act (a) is performed by a data storage device coupled with a memory device comprising the memory array.

15 3. The invention of Claim 2, wherein the data storage device comprises a device selected from the group consisting of a digital audio player, a digital audio book, an electronic book, a digital camera, a game player, a general-purpose computer, a personal digital assistant, a portable telephone, a printer, and a projector.

20 4. The invention of Claim 1, wherein act (a) is performed by a controller of a memory device comprising the memory array.

5. The invention of Claim 1, wherein act (d) is performed by a data reading device coupled with a memory device comprising the memory array.

25 6. The invention of Claim 5, wherein the data reading device comprises a device selected from the group consisting of a digital audio player, a digital audio book, an electronic book, a digital camera, a game player, a general-purpose computer, a personal digital assistant, a portable telephone, a printer, and a projector.

30 7. The invention of Claim 1, wherein act (d) is performed by a controller of a memory device comprising the memory array.

8. A memory device comprising:
a write-once memory array storing a plurality of bits representing data; and
a controller coupled with the memory array and operative to invert the plurality of
bits representing the data when the plurality of bits is read from the memory array.

9. The invention of Claim 8, wherein the controller is further operative to invert a plurality of bits representing data to be stored in the memory array.

10. The invention of Claim 8, wherein the memory device comprises a solid-state memory device.

11. The invention of Claim 8, wherein the memory device comprises an optical memory device.

12. A method for redefining an initial, un-programmed digital state of a write-once memory array, the method comprising:

(a) providing a memory array comprising a plurality of write-once memory cells, the plurality of write-once memory cells comprising an initial, un-programmed digital state that can be switched to an alternative, programmed digital state; and

(b) redefining the initial, un-programmed digital state of the plurality of write-once memory cells as the alternative, programmed digital state by storing bits in the plurality of write-once memory cells in an inverted form.

13. The invention of Claim 12, wherein the initial, un-programmed digital state comprises Logic 1, and wherein the alternative, programmed digital state comprises Logic 0.

14. The invention of Claim 12, wherein the initial, un-programmed digital state comprises Logic 0, and wherein the alternative, programmed digital state comprises Logic 1.

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15. The invention of Claim 1, 8, or 12, wherein the memory array comprises a three-dimensional memory array.

16. The invention of Claim 1, 8, or 12, wherein the memory array comprises a two-dimensional memory array.

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